Water in the Forest

What's in a forest? TREES, of course!
But what helps those trees grow? WATER

Forests are very special because they not only need water to grow, just like you and me, but forests also help to protect, filter and absorb water.

Where does all the water go?

First, anytime it rains, the water lands on the ground and can do one of two things:

1. The water can soak into the ground - this is called infiltration.
Once the water infiltrates into the ground, the trees soak up water out of the ground through the roots. This is called absorption. **It is very important to not cut, trample, or damage tree roots, because this is the main way that trees take in the water they need to grow.**

2. The water can run along the top of the ground surface - this is called runoff. Runoff can carry dirt, trash, chemicals and other pollution along with the water and flow into a stream or pond. This runoff process creates Non-Point Source pollution. **Non-Point Source pollution can be prevented by slowing down or trapping runoff before it starts to flow across the ground.**

But not all of the water gets absorbed by the tree roots. Sometimes, the extra water will slowly trickle down into the deep soil. This is called percolation. The soil in the ground is like a giant sponge, and can hold a large amount of percolated water. All of this extra water in the soil is stored, deep below the ground surface and is called ground water. In many places of North Carolina, families use wells to tap into ground water near their homes for drinking and taking a bath.

Because of this, it is very important that you don't pour out oil, chemicals, paints, or other polluting fluids onto the ground - - these dangerous ingredients can pollute the groundwater, or could become part of Non-Point Source pollution.

Activities:

Find out what kind of water you use at home, and ask an adult to help you see if there are any dangerous items that might be polluting your water.

Take a large, dry sponge and slowly drip water onto the top of it.
Watch as the water infiltrates into the sponge, then percolates down and across the sponge. When the water soaks all the way through the bottom, it has become groundwater. When the sponge is totally soaked through, the water will start to runoff along the top.